

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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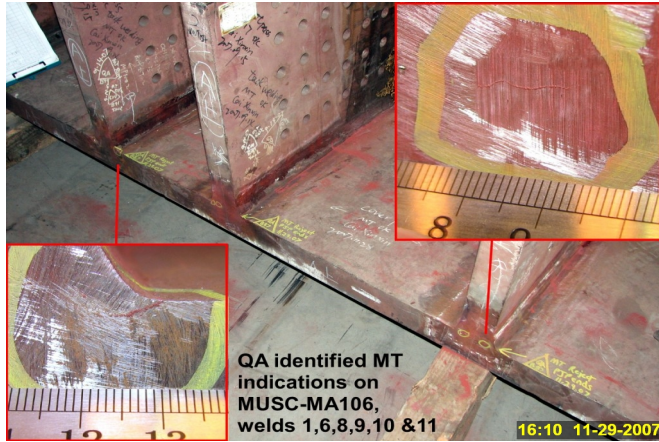
Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-000978**Date Inspected:** 29-Nov-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2330**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Shen Xiu Jun**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** 114 meter mock up**Summary of Items Observed:**

The Caltrans Quality Assurance (QA) inspector, Scott Croff, was present at Zhenhua Port Machinery Company, Ltd (ZPMC) to observe the scheduled mock up construction and production construction of the SAS Superstructure.

Bay 2: The QA inspector observed the 114 meter mock up, skin "A" upper, part MUSC-MA106. The Quality Control Liaison (QCL) "Ken" Zhang Jiadi informed the QA inspector that the partial joint penetration (PJP) welds between the stiffener plates and the skin plate have been inspected by ZPMC technician using magnetic particle testing (MT). The QA inspector was informed that all welds were acceptable. The QA inspector observed that ZPMC technician Cai Xin Xin has written MTOK near these welds, dated 11.28.2007. The QA inspector started conducting 10% verification MT of the PJP welds. While conducting the 10% verification MT, the QA inspector observed relevant indications along the ends of the PJP welds. The relevant indications appear to be along the weld/base metal interface along the skin plate. Some of the indications appear along the toe of the weld and are visible from the top of the weld, as opposed to the end of the weld. The QA inspector noted that relevant indications were observed on 6 total welds. PJP welds #1, 6, 8, 9, 10 and 11 appear to be non-conforming with the contract requirements. See the attached photo and see the attached TL-6028 report for additional information.

WELDING INSPECTION REPORT

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Summary of Conversations:

The QA inspector Scott Croff had a conversation with the QCL "Ken" regarding the 114 meter mock up skin plate assembly, as noted above. The QA inspector was notified that a ZPMC technician has conducted MT of the welds and they were acceptable. The QA inspector visually confirmed the "MTOK" markings visible on the part/welds. Upon the observation of the relevant indications, the QA inspector informed the QCL that at this time, the welds were not acceptable. The QCL was shown the relevant MT indications and several other ZPMC quality control and production workers were informed of the observations. The QCL "Ken" asked the QA inspector if any grinding could be done to remove the indications. The QA inspector responded that Caltrans would not direct the methods needed to remove the relevant MT indications.

The QA inspector Scott Croff then informed the QA inspector Bruce Berger of the observations of relevant MT indications after the acceptance of the welds by ZPMC. The QA inspector Scott Croff showed the areas to the QA inspector Bruce Berger and during this conversation, the QCL Shen Xiu Jun and the QCL "Ken" again approached the QA inspectors. The QA inspectors were repeatedly asked what ZPMC should do to remove the indications and if ZPMC should not do any repairs on this shift. The QCLs were informed again that Caltrans would not direct the methods needed to do the work or repairs and that if ZPMC personnel did not know how to proceed, they should contact the prime contractor to determine the proper course of action. There were no other notable conversations during this shift.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Croff, Scott	Quality Assurance Inspector
Reviewed By:	Cuellar, Robert	QA Reviewer
